# **Sample Emergency Plan**

(for Community Systems Serving 501 People or More)



This sample emergency plan (plan) is intended to illustrate a general plan for public water systems serving 501 or more people. The content of this plan is based on the Emergency Plan Guide (Guide) document for large systems that is available from the Department of Environmental Services (DES). It is also based on New Hampshire Administrative Rule Env-Ws 360.15, which requires all community public water systems in this state to have an emergency plan. You are not required to use this sample plan – it is simply a tool to help you write your own plan. Since each system is different this plan merely offers ideas, which may or may not apply to your system. If you have already developed a plan of your own you may submit that, as long as it includes the minimum requirements and signatures. Our sample plan refers to a fictional water system called Graniteville Water District. Instructions are in *italics* and example plan language sections are in **bold**.

### System Identification (Section 1 of the Guide)

{For system identification, simply fill out Section 1 of the Guide as shown below. Information about your system is available through the DES website at <a href="www.des.state.nh.us/wseb">www.des.state.nh.us/wseb</a> under One Stop Data Retrieval: Public Water System Information or call the DES at 271-7017.}

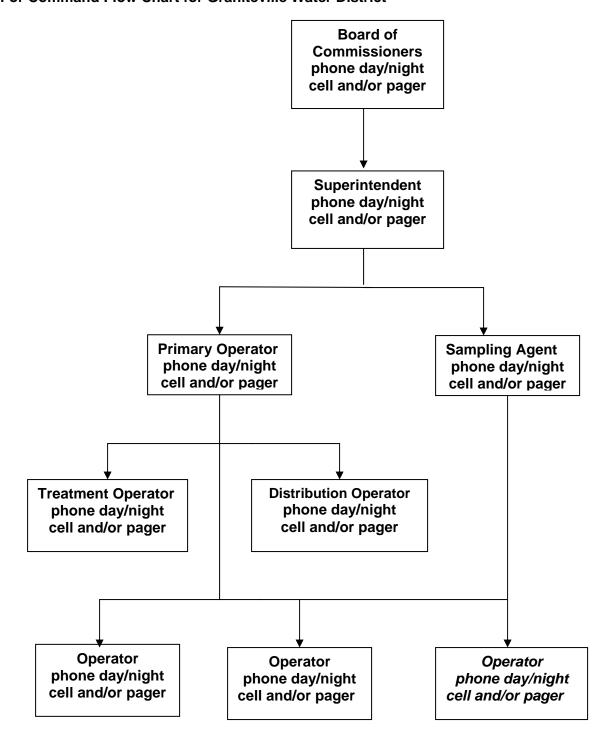
System Identification Table - Guide Page 1

System EPA Identification Number	3011010		
System Name	Graniteville Water District		
Town	Watertown		
Source ID/Type/Description/Well Yield from DES records	001 / GPW / 65 feet west of pu	umphouse #1	125 gpm
Source ID/Type/Description/Well Yield from DES records	002 / GPW / 180 feet north of pumphouse #2		
Source ID/Type/Description/Well Yield from DES records	004 / GPW / 240 feet east of pumphouse #2		2
Population Served and Service Connections from DES records.	2400 people	960	connections
Date of most recent emergency plan in DES records	1989		
Name, Title, and Phone Number of person responsible for maintaining this emergency plan.	John Doe, Superintendent name and title		123-4567 phone

### Chain of Command Flow Chart (Section 2 of Guide)

{Your plan must include a Chain of Command flow chart such as the fictional one for Graniteville Water District shown below. On your chart include **all the key** people who will be responsible for managing an emergency at your water system. The person shown at the top has overall responsibility for managing an emergency at your system. The Chain of Command (section 2) and Notification Procedures (section 3) are an important part of your plan.}

#### **Chain-of-Command Flow Chart for Graniteville Water District**



### Chain of Command Responsibilities (Section 2 of Guide)

{Your plan must include a brief description of each key person's responsibilities during an emergency. Be sure to include everyone shown on your chain of command flow chart. Please note that each system is different and so are each systems responsibilities. Therefore, the list below may or may not include all of the responsibilities for each person in your system.}

#### **Graniteville Water District Board of Commissioners**

1. If necessary instruct the Superintendent to implement water conservation measures, including rationing.

#### **Graniteville Water District Superintendent**

- 1. Overall responsibility for managing a water emergency at Graniteville Water District.
- 2. Immediately notify all personnel on the chain-of-command of the existence of a water emergency.
- 3. If necessary, immediately notify local and state emergency agencies, such as police, fire, ambulance, health, and DES Water Supply Engineering Bureau of the existence of a water emergency.
- 4. Be available as contact person for local and state emergency agencies.
- 5. If necessary, represent the system as spokesperson to all outside parties including the media and private citizens.
- 6. If necessary, instruct the Sampling Agent to implement the system user and unique system user notification procedures.
- 7. If necessary, instruct the Primary Operator to implement the service/repair notification procedure.
- 8. If necessary, instruct the Sampling Agent to implement the boil order procedure and alternate water procedures.
- 9. If necessary, implement and oversee water conservation measures.

#### **Graniteville Water District Primary Operator**

- 1. Be available as necessary to provide hands-on knowledge of system components.
- 2. Be available as necessary to provide specialized repair of system components such as pumps, water treatment devices and valves. (Note: Not all system operators have this expertise if you need to, look into outside specialists to contact in emergency situations)
- 3. Implement and oversee service/repair notification procedures.
- 4. Oversee service/repair efforts by system personnel and outside contractors.
- 5. Oversee and coordinate the return to normal operation.

#### **Graniteville Water District Sampling Agent**

- 1. Take all necessary water samples and transport them to a certified laboratory for analyses.
- 2. Be responsible for and maintain up-to-date notification lists.
- 3. Implement and oversee system user and unique user notification procedures.
- 4. If necessary, implement and oversee boil order processes.
- 5. Assist Superintendent as necessary with emergency management issues.

### **Graniteville Water District Treatment Operator**

- 1. Provide specialized repair of treatment components.
- 2. Assist Primary Operator as necessary with service/repair notification and efforts.
- 3. Assist Primary Operator as necessary with return to normal operation.

#### **Graniteville Water District Distribution Operator**

- 1. Provide specialized repair of distribution components.
- 2. Assist Primary Operator as necessary with service/repair notification and efforts.
- 3. Assist Primary Operator as necessary with return to normal operation.

#### **Graniteville Water District Operators**

- 1. Make available and coordinate use of system equipment such as keys, tools, spare parts, and vehicles.
- 2. Assist as necessary with service/repair efforts.
- 3. Assist as necessary with notification procedures.

### Notification Procedures (Section 3 of Guide)

{A good emergency plan covers 3 aspects of notification: (1) delegating the responsibility to oversee and accomplish notification; (2) establishing the process of notification, i.e. the procedure you will use to quickly disseminate information to appropriate parties; and, (3) assembling lists of appropriate parties to contact. This section covers step 2 — writing out your notification procedure, which is an important step in the notification process. In our sample, a local daily newspaper and a local radio station are the basic means of accomplishing notification. When you write your plan please keep in mind that the larger the system, the more complicated rapid notification becomes. Therefore, the notification procedure you choose should be effective for the size of your system. Keep in mind that a system may identify several possible notification list scenarios as illustrated below for Graniteville Water District.}

#### **Water System Users**

The Graniteville Water District Sampling Agent is responsible for implementing notification to the water system users. Graniteville has approximately 960 service connections, or one connection per household. Notification will be accomplished primarily through announcements placed in a local daily newspaper and/or a popular local radio station. Supplemental user notification procedures may also be used including: a telephone answering message at our system office building; posting notices inside the Graniteville town hall, post office, and transfer station; and, placing an announcement on the message board in front of the town hall.

#### **Unique Water System Customer**

Graniteville Water District provides water service to a nursing home that requires potable water for medical reasons to approximately 40 residents. During emergencies causing interruption of service, the Sampling Agent is responsible for providing priority notification to this customer. Priority notification will also be given to this customer for boil orders and alternate water will be supplied on a priority basis. If the Sampling Agent cannot reach the nursing home by telephone, then a visit to the home will be made. The nursing home is included on our local notification list.

#### Service/Repair

The Graniteville Water District Primary Operator is responsible for implementing notification to service/repair contractors. A list of service/repair contractors and phone numbers is part of this emergency plan. The Primary Operator will use this list to telephone appropriate contractors. If necessary, the Treatment and Distribution Operators will assist. The Sampling Agent is responsible for maintaining an up-to-date service/repair contractor list.

#### **Local and State Agencies**

The Graniteville Water District Superintendent is responsible for implementing notification to local and state agencies. A list of local and State agencies and phone numbers is part of this emergency plan. The Superintendent will use this list to telephone appropriate agencies. If necessary, the Sampling Agent will assist. The Sampling Agent is responsible for maintaining an up-to-date local and state notification list.

### Nearby Public Water Systems

Three other water systems are situated within 1 mile of the Graniteville water system – a mobile home park, a housing development, and the Othertown municipal system. If necessary, the Sampling Agent will notify these systems using telephone or email. The telephone numbers of the systems are part of this emergency plan. This notification will be done after the water system user notification is completed.

# Notification Lists (Section 3 of Guide)

{A good plan will include up-to-date notification lists. The notification lists on page 2 of the Guide are only a reference. Adapt them to meet your system needs. Be thorough, and remember to update your lists as necessary on an annual basis.}

#### **Local Notification List**

Notification List Boilerplates - Guide Page 2

Fire Dept	day	Fire Dept night
· ·	###-###	###-####
Police De	pt day	Police Dept night
	###-####	###-####
Ambuland	ce service day	Ambulance service night
	###-####	###-####
Emergency Management Office day		Emergency Management Office night
	###-####	###-####
Health Of	fice day	Health Office night
	###-###	###-###
Local Newspaper day		Local Newspaper night
	###-####	###-###
Local Radio Station day		Local Radio Station night
	###-####	###-####
Other		Other
Othertown Water Department day ###-####		Othertown Water Department night ###-####
Other		Other
	Graniteville Nursing Home day ###-####	Graniteville Nursing Home night ###-####
Other	Nearby Mobile Home Park day ###-####	Other Nearby Mobile Home Park night ###-####
	Close Housing Development day ###-####	Close Housing Development night ###-####

#### State Notification List

State Police day	State Police night	
1-800-852-3411	1-800-852-3411	
Water Supply Engineering Bureau day	Water Supply Engineering Bureau night	
271-2513 or 271-3503	271-2513 or 271-3503	
Office of Emergency Management day	Office of Emergency Management night	
271-2231 or 1-800-852-3792	271-2231 or 1-800-852-3792	
Public Health Services day	Public Health Services night	
271-4496	271-4496	

Service/Repair Notification List

Electrician day		Electrician night	
2.001.0.0 44,	###-####		###-####
Electric Utility day		Electric Utility night	
• •	###-####	, ,	###-####
Plumber day		Plumber night	
·	###-####	-	###-####
Pump Specialist #1 day		Pump Specialist #1 night	
	###-####		###-####
Pump Specialist #2 day		Pump Specialist #2 night	
• •	###-####		###-####
Soil Excavator #1 day		Soil Excavator #1 night	
•	###-####	-	###-####
Hydrogeologic Consultant day		Hydrogeologic Consultant night	
	###-####		###-####
Emergency Response Consultant day		Emergency Response Consultant night	
	###-####		###-####
Equipment Rental day		Equipment Rental night	
•	###-####		###-####
Other		Other	

After you complete your notification lists, don't forget to answer the Notification and Unique Water System Customer Questions on page 3 of the Guide as shown below.

Unique Customer Question - Guide page 3

Does this system have service customers with unique water needs?



The unique service customer for Graniteville Water District is the nursing home discussed in the Notification Procedures section.

## System Components (Section 4 of the Guide)

{A good emergency plan will include a list of your system's primary features. Refer to the section headed System Equipment on page 3 of the Guide for the features you should include at a minimum. It is a good idea to also list important repair equipment that you may have such as, excavation equipment or significant spare parts. If you have an atmospheric storage tank you will need to indicate whether or not it is equipped to accept truck delivery of bulk water and you will need to answer the questions about atmospheric tanks on page 3 of the Guide.}

### System Plan

You need to submit an engineering plan of your water system that accurately shows all of its primary components, including important subsurface components such as distribution lines and key shutoff points. However, DES recognizes that some systems may be concerned with providing this information to DES since it becomes available to the public once it has been submitted. If you have this concern, please do not submit your plan. Instead provide an explanation regarding the status of your plan. DES will review the plan during sanitary surveys. DES also realizes that not all systems will have an engineering plan of their water system. If that is the case with your system, we do not expect you to incur the cost of having such a plan prepared. Instead, you can draw a schematic of your system keeping in mind that you should be as accurate as possible. Use a scale that is workable and appropriate for your system. Another method might be to draw your system on an existing street map or perhaps a town map or lot map available at municipal assessor's offices. DES has well and distribution system locations in its geographic information system database and could help you with maps or electronic data.

Below are a typical list of system components and the atmospheric tank questions for our sample plan.

#### System Equipment

- 1. Gravel packed well #001 65 feet west of pumphouse #1 180,000 gallons per day maximum 24-hour production.
- 2. Gravel packed well #002 180 feet north of pumphouse #2 259,200 gallons per day maximum 24-hour production.
- 3. Gravel packed well #004 240 feet east of pumphouse #2 360,000 gallons per day maximum 24-hour production.
- 4. Bedrock well #003 inactive source 725 feet northwest of pumphouse #1 46,080 gallons per day maximum production.
- 5. Pumphouse #1 located at end of dirt access road off Main Street extension.
- 6. Pumphouse #2 located at end of dirt access road off River Road.
- 7. Single 1,400,000-gallon storage tank located at end of Hill Road.
- 8. Corrosion control and disinfection treatment systems located inside each pumphouse.
- 9. One Case 280 backhoe.
- 10. Two vans and two pickup trucks, one equipped with snowplow.
- 11. One utility truck equipped with electric winch.
- 12. One air compressor.
- 13. One diesel generator situated inside each pumphouse.
- 14. Welding equipment.
- 15. Two-way radio communication system interfaced with Graniteville town radio system.
- 16. Two lengths 10-inch ductile iron pipe, two lengths 8-inch ductile iron pipe and repair sleeves.
- 17. One 10-inch and one 8-inch spare shutoff valves.
- 18. De-watering pump, small generator, hydraulic jackhammer, portable lights.
- 19. Two battery backups for telemetry system.

A	tmospheric Storage Tank Questions – Guide Page 3
Does this system have an atmospheric storage tank? If yes, how many?	Yes No 1 # tanks
Are your atmospheric storage tank(s) equipped with a fill pipe for supplied water?	Yes No N/A

If you answered "No" above, please indicate in the box below when your atmospheric storage tanks will be equipped with fill pipes for tank truck water delivery (per Env-Ws 372.24).

Atmospheric Storage Tank Questions - Guide Page 3

Our 1,400,000-gallon storage tank is not equipped with a fill pipe because our system demand and the size of the tank are too large for viable tank truck water delivery.

#### Hydraulic Connection Between Sources

The plan that you submit to the DES must include a brief description of hydraulic connection that may exist between your sources. If pumping a single well results in drawdown in other wells, hydraulic connection exists between those wells. Pumping rates can also influence hydraulic connection. If a contamination emergency occurs in one or more of your sources, it will be important to know the hydraulic relation between your sources because you want to avoid pumping contaminated water into an uncontaminated well. Your description does not need to be detailed, rather, you should base it on existing information and your own experience and knowledge. A sample description for our fictional water system is below.

Graniteville Water District has three active gravel-packed wells and one inactive bedrock well. Inactive well 003 has been out of service since gravel packed well 004 came on-line 10 years ago. The closest of our sources to 003 is 001, which is approximately 700 feet away. Based on our earlier pumping experiences, no hydraulic connection exists between 003 and our 2 older gravel-packed wells. Source 001 is situated approximately one half mile from sources 002 and 004. No hydraulic connection exists between 001 and 002 or 004. Sources 002 and 004 are situated approximately 300 feet apart. Our normal practice is to pump these two wells alternately and the pumping rates vary. A slight drawdown occurs in the other well only after either 002 or 004 has been pumped at near maximum rates for 6 or more hours. Hydraulic connection between 002 and 004 is not observed at less than maximum pumping rates.

### System Demand

Shown below is our fictional system's brief description of its ability to isolate sections of the distribution system and the System Design table on page 4 of the Guide.

Graniteville Water District has a telemetry system for operating our pumphouses, treatment systems and storage tank. We have six shutoff valves to isolate sections of our distribution system. We also have spare shutoff valves, which we could use to deadend broken distribution lines in an emergency. Each pumphouse also contains manual controls for pumps and treatment devices.

System Demand Table - Guide Page 4

	·
What is the total production capacity of this system?	845, 280 (including inactive BRW) gallons per day
What is the total storage capacity of this system?	1,400,000 gallons
What is the average daily demand of this system?	288,000 gallons per day
What is the maximum daily demand of this system?	372,000 gallons per day
Divide total storage capacity by average daily demand.	4.9 days

### Alternate Water Source (Section 6 of the Guide)

{An important part of a plan is to establish how a system will provide alternate water if necessary during an emergency. As discussed on pages 4 and 5 of the Guide, systems are required to submit brief discussions of bottled/bulk water, new sources, and tie-in to adjacent systems as viable sources of alternate water. Systems are also required to discuss how their water treatment capabilities could be utilized during an emergency. Below are examples of typical language a system could use to describe its process of supplying alternate water. You also need to answer a few questions on page 5 of the Guide as shown below.}

#### **Bottled and Bulk Water**

Bottled and bulk water are not viable alternate water sources for Graniteville Water District because our system is too large. However, we have contingencies to supply potable water to the nursing home if necessary during an emergency. If our system is partially operational, we will fill containers from non-impacted areas of our system and transport them to the nursing home. If our system is completely out-of-service, we will fill containers at the nearby Othertown municipal system and take them to the nursing home. The nursing home has in-house contingencies for water conservation or rationing during an emergency.

B	ottled/Bulk W	ater Questions	– Guide page 4
Is tank truck/bottled water a viable alternate water source for your system?		Yes	No
If you answered "Yes" above, have you discussed your potential water needs with at least 2 suppliers?	Yes	No	N/A
If you answered "Yes" above, approximately how long will it take for alternate water to reach this system?	hours		

#### **Water Supply Treatment**

As mentioned above, Graniteville Water District could utilize its existing treatment capability to bring its inactive bedrock well on line during an emergency. We do not have the capability to treat surface water, so that is not a viable emergency potable water source option for our system.

### **Tie-in to Adjacent Water Supply System**

Three other water systems are situated within 1 mile of our system – Nearby Mobile Home Park, Close Housing Development, and Othertown Water Department. The mobile home park and the housing development are both situated approximately one half mile from our system at their closest points. The Graniteville Superintendent contacted both of these systems to discuss interconnection. Each system is supplied by two bedrock wells that are adequate for their needs but provide little excess capacity. As a result these two systems are not viable emergency alternate water sources for us.

Othertown Water Department is situated just less than 1 mile from our system at its closest point. The Graniteville Superintendent contacted Othertown Water Department to discuss the feasibility of providing a connection point between the systems as an emergency standby. Othertown was receptive to the idea but expressed that details would need to be worked out and an agreement reached. It was agreed that further discussions would be held in the next year. At this time it is not known how the connection could be made.

	Adjacent Water System Questions – Guide Page 5
Does this system have a copy of the Drinking Water Resource Map for its town?	Yes
Are any water systems situated adjacent to this system?	Yes
Is it feasible for this system to connect to an adjacent system?	Yes
Have you discussed the feasibility of connecting to another system(s) with representatives of that system(s)?	Yes

### **New Source**

Graniteville Water District has no plans to develop additional sources at this time. Our existing sources are more than adequate to meet our water supply needs. In an emergency our inactive bedrock well could be brought into service. To use this well, we would have to reconnect it to the system and treat the water for high iron and manganese. At maximum production rates this well only provides approximately 16% of our average demand. However, it is potentially a viable source of alternate water during an emergency.

# Boil Order (Section 7 of the Guide)

{Below is an example of typical language a system could use to describe its process of implementing a boil order.}

Graniteville Water District will defer to the DES and/or the Graniteville Health Officer to make decisions requiring or canceling a boil order. Graniteville Water District will use the water system user notification process described earlier to implement a boil order and also to cancel a boil order. Priority notification will be given to the nursing home served by our system.

## Water Conservation (Section 8 of the Guide)

{Emergency response actions often include water conservation as a means of coping with the loss of source capacity. An obvious example is a drought, where conservation may be the only response action taken. Therefore, a good emergency plan for a water system will set forth water conservation measures, estimate how much water could be saved, describe how it will be implemented, and who will oversee it. The degree of water conservation necessitated by an emergency can be dependent upon factors such as the nature, severity, and duration of an emergency, seasonal demands on your system, storage capacity, and excess capacity. Some systems already have water conservation policies in place, for reasons of drought management and water use reduction. A typical plan section on water conservation for a large system is shown below.}

Graniteville Water District has an existing water conservation policy for drought management. Our policy is based on water use requirements that progress from restrictions to bans to rationing depending upon the severity of the drought. This same policy would be implemented if source capacity were reduced or lost via another type of emergency such as a contamination event. Our water conservation policy is outlined below.

- 1. Watering gardens, lawns and other landscaped areas will be restricted at a minimum or banned entirely.
- 2. Washing cars, trucks, boats, RVs, etc., will be restricted at a minimum or banned entirely.
- 3. Using water from a hose to rinse or clean sidewalks, driveways, decks, etc. will be restricted at a minimum or banned entirely.
- 4. Filling swimming pools will be restricted at a minimum or banned entirely.
- 5. Residents will be required to follow indoor water use restrictions adopted from DES Fact Sheet #WD-WSEB-26-2 that lists water efficiency practices for indoor domestic water use.
- 6. In a prolonged or dire emergency, rationing will be implemented.

If an emergency necessitates shutting down one of our gravel-packed wells, the excess capacity in the remaining two wells will be used to supply our system. Similarly, with all three wells operational our excess capacity allows us to meet average daily demand while absorbing significant reduction in pumping volumes. Despite our excess capacity, Graniteville Water District will implement at its discretion water conservation measures during an emergency. For most emergencies, because of our excess capacity it will be adequate to implement conservation measures 1, 2, 3, and 4 as restrictions. The Board of Commissioners will decide whether measures 1 through 4 will be restrictions or bans. System demand is greatest in the summer months with an average daily summer demand of approximately 320,000 gallons. Consequently, we estimate that if an emergency occurs in the summer, by implementing measures 1 through 4 as bans, average daily summer demand would immediately be reduced by approximately 30 to 40 percent. This would reduce our average daily summer demand to approximately 192,000 to 224,000 gallons, below the capacity of our two wells and well below the total production capacity of our system. Additional demand reductions would be achieved by implementing step 5. Water conservation options are more limited during a winter emergency although this is balanced by the lower overall daily demand. Graniteville Water District encourages the use of water conservation practices at all times and is going to

implement a leak detection program in the upcoming year. Additionally, we have instituted a program to encourage our largest water users to take steps to conserve water.

In the event of a prolonged or severe emergency, measures 1 through 4 will be instituted as bans, and measure 6 will be put into effect. If that happens, measure 6 will supercede measure 5. Rationing per system user will be computed to reduce our daily demand to less than 100,000 gallons. At that rate, when full our total storage capacity would provide for approximately 14 days of consumption, which nearly triples our average number of storage-days.

The Superintendent under instruction by the Board of Commissioners will implement water conservation notification at Nearby MHP. The Sampling Agent will assist the Superintendent. Graniteville will use the same notification procedure described earlier to implement and cancel water conservation measures.

# Return to Normal Operation (Section 9 of the Guide)

{Your plan must include a brief description of the process you will use to return your system to normal operation following an emergency. A typical description that a large system might use for this topic is shown below. }

The decision when to return to normal system operation will be made by the Superintendent. The Superintendent will make this decision with input from the DES if contamination is the cause of the emergency event. The Primary Operator will have the responsibility of overseeing the return to normal operation of the system components. The Treatment and Distribution Operators will assist the Primary Operator. The Sampling Agent will do any additional water sampling that may be necessary to assess system conditions before returning to normal operation. All water system users will be notified using the same telephone/email tree and notice posting system described earlier when the system has been returned to normal operation.

# Plan Readiness (Section 10 of the Guide)

{Plan readiness is the arrangements made by the system to ensure that its plan is always functional and available for use on very short notice (perhaps measured in minutes). At a minimum, all key people must know where to quickly find the plan and be familiar with their roles. Each key person should have a copy of each updated plan. Other pertinent places to store up-to-date plans include system offices, workshops, pumphouses, and meeting rooms. Your emergency plan must include a brief description of your plan readiness arrangements. You also need to answer the plan readiness questions on page 5 of the Guide. A sample plan readiness description and answered questions are below.}

Graniteville Water District has taken the following steps to ensure plan readiness.

- 1. Each person listed on our chain-of-command will keep a copy of this and each annually updated plan in their office.
- 2. A copy of our most recent plan will be kept in our office conference room.
- 3. A copy of our most recent plan will be kept in the Superintendent's residence.
- 4. A copy of our most recent plan will be posted in our shop building.
- 5. A copy of our most recent plan will be kept in each of our pumphouses.
- 6. The cover of our plan is brightly colored to make it easy to find.
- 7. In all cases, earlier plans will be discarded after receipt of a newer plan.
- 8. Graniteville Water District will rehearse the plan once every 2 years.

Do the key representatives of this system know about this emergency plan?

Does this system have a specific location where an up-to-date copy of its emergency plan is stored at all times?

Has this system clearly defined for each key person what his or her responsibilities will be during an emergency, i.e., does each key person clearly understand their role?

Has this system rehearsed its emergency plan?

## Signatures (Section 11 of the Guide)

{At least two representatives of each large system must sign and date the completed Guide to attest that the information on the Guide and attachments is accurate. If another party such as an independent contractor is the primary author of the plan, they must sign the completed Guide in addition to the system representatives.}

# Vulnerability Assessment (Section 5 of the Guide)

{A vulnerability assessment was not included with this sample plan because it is not required under Env-Ws 360.15. The purpose of a vulnerability assessment is to identify potential causes of emergencies. Both preventable (lack of spare parts, age of equipment, unwise land usage near your sources, etc.) and unpreventable (drought, ice storms, vehicle accidents, sabotage, etc.) causes are identified. Once potential causes are identified, a system can take preventative actions to reduce their susceptibility to an emergency. As such, a vulnerability assessment is a valuable management tool. A vulnerability assessment is the **preventative** or **long-term** aspect of emergency planning, while the information in this sample plan is the **response**, or **short-term** aspect. A system will greatly improve the effectiveness of its' emergency planning by first doing a vulnerability assessment, and then incorporating its findings into their formal emergency plan. **DES strongly recommends that every system voluntarily decide to do a vulnerability assessment.** Additional self-help documents are available on the DES Water System Security website at <a href="https://www.des.state.nh.us/wseb">www.des.state.nh.us/wseb</a>. }

# **Any Questions?**

Johnna McKenna
Department of Environmental Services
Box 95
Concord, New Hampshire 03302-0095
603-271-7017 or imckenna@des.state.nh.us